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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/701,193 | 11/04/2003 | Osamu Kurosawa | 8305-234US (NP61-0002-1) | 6237 |
| 570 7590 03/06/2007 AKIN GUMP STRAUSS HAUER & FELD L.L.P. ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103 | | | EXAMINER LANG, AMY T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3731 | |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 03/06/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/701,193

Applicant(s)

KUROSAWA ET AL.

Examiner

Amy T. Lang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Response to Arguments

Applicant's arguments filed 08/18/2006 have been fully considered but they are not persuasive.

1. Specifically, applicant argues (A) the phosphorus content of the claimed composition is critical as supported by the instant specification.

With respect to argument (A), the instant claim 1 discloses phosphorus content from 0.025 to 0.5 mass percent and the instant claim 2 discloses phosphorus from 0.03 to .035 mass percent. The composition of Tersigni comprises phosphorus from about 0.02 to 0.08 mass percent (column 2, lines 9-11). This range clearly anticipates the range disclosed in claim 1 since 0.02 falls directly within that range. With regard to claim 2, the specification provides support for the criticality of the composition comprising less than 0.03 mass percent of phosphorus. However, criticality for having more than 0.035 mass percent of phosphorus is not supported by the specification. Therefore, the criticality supported by the instant specification is not commensurate in scope and therefore not found persuasive. For example, the scope does not support criticality for 0.04 mass percent of phosphorus, which is encompassed by the range disclosed by Tersigni. Additionally, Tersigni discloses the composition comprising about

0.02 to 0.08 mass percent of phosphorus. Therefore, it would be reasonably expected by one of ordinary skill in the art for about 0.02 to encompass 0.03.

2. Specifically, applicant argues (B) the sulfur content of the claimed composition is critical as supported by the instant specification.

With respect to argument (B), Tersigni discloses the total sulfur content of the composition derived from a sulfurized phenolic antioxidant, specifically 4,4'-thiobis(2-methyl-6-tert-butylphenol) (column 10, lines 46-56). This compound comprises 8.89 wt% of sulfur in the total compound ($\text{MW of sulfur} / \text{MW of bisphenol} = 32 / 360$). The antioxidant is present in the lubricating composition from 0 to 1 mass percent (column 11, lines 15-30). Therefore, the total sulfur content in the lubricating composition is from 0 to 0.089 wt%. This range clearly anticipates the instantly claimed ranges of 0 to 0.15 and 0.05 to 0.14.

3. Specifically, applicant argues (C) the %Cp of the base oil is critical as supported by the instant specification.

With respect to argument (C), it is the examiner's position that the comparative data is not found persuasive. The examples disclosed in the instant specification do not directly compare only the difference between a composition comprising the instantly claimed ranges of %Cp and compositions outside of those ranges. Comparative example 2 also comprises sulfur content more than within the claimed range. Comparative example 5 also comprises a viscosity and sulfur content not within the claimed ranges. Therefore, the criticality of the %Cp is not found persuasive.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tersigni (US 6,482,778 B2) in view of Komiya (US 2001/0044389 A1).

Tersigni discloses a transmission fluid composition comprised of base oil and a phosphorus-containing additive (column 1, lines 8-13; column 2, lines 1-4). The base oil is disclosed as a mineral oil, including paraffinic and naphthenic mineral oils, with a kinematic viscosity of 3 to 8 centistokes at 100 degrees Celsius (column 12, lines 9-18). Although the instant claims 1 and 2 do not include the temperature at which the kinematic viscosity was measured, it is the examiner's position that the applicant has support for a temperature of 100 degrees Celsius in view of page 5 of the specification. Since centistokes is equivalent to mm²/s, this viscosity range clearly overlaps the instant

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claims 1 and 2. Tersigni also discloses the addition of a viscosity index improver so that the kinematic viscosity of the composition is increased to at least 5.0 cSt at 100 degrees Celsius (column 12, lines 24-27). This range clearly overlaps the instant claims 1 and 2 since 5.0 cSt falls directly within the instant range of 5.0 to 6.0 mm²/s. The phosphorus content is also disclosed as 0.02 to 0.08 percent by mass (column 2, lines 9-11). Additionally, Tersigni discloses that antioxidants, including sulfurized phenolic antioxidants are typically added to the composition (column 10, lines 46-50). These antioxidants are further disclosed in the content of 0 to 1 mass percent, which clearly overlaps the instant claims 1 and 2. However, Tersigni is silent as to the % Cp of the disclosed mineral oil.

Komiya discloses a lubricating composition for transmissions comprised of mineral oil, including paraffinic and napthenic mineral oils ([0002], 0012], [0016]). The disclosed mineral oil has a kinematic viscosity of 1 to 4 mm²/s, which clearly overlaps the instant claims 1 and 2 ([0014]). Additionally, the % Cp of the oil is disclosed as 70 or higher as defined by ASTM D 3238 ([0012]). It is the examiner's position that the transmission oils disclosed by Tersigni and Komiya both contain similar mineral oils, paraffinic and napthenic oils at the same viscosity, and would therefore display the same characteristics. Komiya specifically uses mineral oil with a % Cp from 75 to 81 since base oil in this range of % Cp displays excellent low temperature fluidity (Table 1, page 8, {0013}). Therefore, it would have been obvious to use a base mineral oil in the range of % Cp from 75-81 in the transmission disclosed by Tersigni, because Komiya

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teaches enhanced low temperature fluidity would result. Therefore, one of ordinary skill would thereby obtain the invention as set forth in the presently cited claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy Lang whose telephone number is (571) 272-9057. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571) 272-4963. The fax phone

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number for the organization where this application or proceeding is assigned is (571)
273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2/21/2007

Amy T. Lang

ATL


ANH TUAN T. NGUYEN
SUPERVISORY PATENT EXAMINER
3/2/07